

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A water-based pigment dispersion ~~in which~~ comprising:
a pigment ~~is dispersed with~~ and a cross-linked ~~water soluble or self-emulsifying~~ thermoplastic resin
containing carboxylic group, ~~characterized in that~~

wherein said pigment is dispersed with a water soluble or self-emulsifying thermoplastic
resin containing carboxylic group and, after said pigment is dispersed, said water soluble or self-
emulsifying thermoplastic resin is cross-linked with a cross-linking agent to form said cross-linked
thermoplastic resin containing carboxylic group,

in which the ratio of ~~the~~ said pigment to ~~the~~ said water soluble or self-emulsifying
thermoplastic resin ~~containing the carboxylic group~~ (pigment/thermoplastic resin ~~containing~~
~~carboxylic group~~ (weight ratio of effective solid matter)) is 10/10 to 10/1, and

~~the thermoplastic resin containing the carboxylic group is cross-linked with a cross-linking
agent after the pigment is dispersed with the thermoplastic resin, and~~

the ratio of ~~the~~ said cross-linking agent to ~~the~~ said water soluble or self-emulsifying
thermoplastic resin ~~containing the carboxylic group~~ (cross-linking agent/thermoplastic resin
~~containing carboxylic group~~ (weight ratio of effective solid matter)) is 1/100 to 50/100.

Claim 2 (Currently Amended): The water-based pigment dispersion of Claim 1, wherein

the water soluble or self-emulsifying thermoplastic resin containing carboxylic group is an acrylic resin or a polyurethane, and the thermoplastic resin has number average ~~molecule~~ molecular weight of 2000 to 20000 and acid value of 30 to 300.

Claim 3 (Original): The water-based pigment dispersion of Claim 1, wherein the cross-linking agent is an aqueous polymer of which reaction point for cross-linking is carboxylic group.

Claims 4 - 8 (Canceled)

Claim 9 (Original): A water-based ink containing the water-based pigment dispersion of Claim 1.

Claim 10 (New): A process for preparing the water-based pigment dispersion of Claim 1, comprising the steps of:

- (1) predispersing a pigment and a water soluble or self-emulsifying thermoplastic resin containing carboxylic group to give a mixture,
- (2) treating said mixture by a dispersing machine so as to disperse said pigment with said thermoplastic resin to give a dispersion,
- (3) cross-linking said thermoplastic resin in said dispersion with a cross-linking agent, and
- (4) adjusting the pH of the dispersion containing said pigment and the cross-linked thermoplastic resin to alkaline range.